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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,030	12/11/2000	Majid Dadafshar	PULSE.091A	5487

20995 7590 04/10/2002

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EXAMINER

DINH, TUAN T

ART UNIT PAPER NUMBER

2827

DATE MAILED: 04/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/735,030

Applicant(s)

DADAFSHAR, MAJID

Examiner

Tuan T Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. Applicant's election without traverse of Group I (claims 1-11 and 17-18) in Paper No. 5 is acknowledged.

#### *Drawings*

2. Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification is silent regarding **"a connector, line 1"**

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, line 1, it is unclear. Applicant recites "further comprising a main circuit board" but in claim 1, line 9, applicant recites "a main circuit board" Does applicant meant of another "a main circuit board disclosed in claim 6?"

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-11, and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoh et al. (U. S. Patent 5,521,473).

As to claims 1, and 4-6, Inoh discloses an electrical device as shown in figures 3-27 comprising:

a plurality of printed circuit boards (58) configured into a multi-layer (50, column 5, line 30) configuration;

at least a first printed circuit board (58) of said plurality of printed circuit boards comprising a primary winding of a transformer (N11, N12, column 6, lines 63-64);

at least a second printed circuit board (58) of said plurality of printed circuit boards comprising a secondary winding (N21, N22) of the transformer; and  
a plurality of connector pins (41-42-figure 5, column 5, lines 55-57) configured to electrically connect the primary winding and the secondary winding to a main circuit board (110).

As to claim 2, Inoh discloses an electrical device as shown in figures 3-27 wherein each pin (41) of the plurality of connector pins penetrates only the at least one first printed circuit board (58).

As to claim 3, Inoh discloses an electrical device as shown in figures 3-27 wherein the at least one first printed circuit board (58) and the at least one second printed circuit board (58) are electrically separated from each other.

As to claim 7, Inoh discloses an electrical device as shown in figures 3-27 comprising:

- a plurality of core members (30-figure 3, column 5, lines 12-13);
- a plurality of printed circuit boards (58) configured to be stackable in a multi layer configuration (50, column 5, line 30) between the core members (see figure 4);
- at least a first printed circuit board (58) of the plurality of printed circuit boards comprising a primary winding (N11, N12, column 6, lines 63, 64) of a transformer;
- at least a second printed circuit board (58) of the plurality of printed circuit boards comprising a secondary winding (N21, N22) of the transformer;

a connection member (51; 52; 53, column 5, lines 47-49, column 6, lines 63-67) configured to selectably connect the winding on at least two of the plurality of printed circuit boards in either a parallel or a series electrical configuration; and

a plurality of connector pins (41, 42-figure 5, column 5, lines 55-57) configured to electrically connect the windings on the plurality of printed circuit boards to a main circuit board.

As to claim 8, Inoh discloses an electrical device as shown in figures 3-27 wherein each pin of the plurality of connector pins (41, 42) penetrates only the at least one first printed circuit board or the at least one second printed circuit board.

As to claim 9, Inoh discloses an electrical device as shown in figures 7, 11-15 wherein each of the plurality of printed circuit boards comprises four to six layers.

As to claim 10, Inoh discloses an electrical device as shown in figures 3-27 wherein the at least one first printed circuit board and the at least one second printed circuit board are electrically separated from each other.

As to claim 11, Inoh discloses an electrical device as shown in figures 3-27 wherein said device is configured to function as a transformer (column 5, lines 31-32).

As best understood to claims 17-18, Inoh discloses an electrical device as shown in figures 3-27 comprising:

a plurality of core members (30);

a plurality of printed circuit boards (58), positioned between the plurality of core members (30), wherein the plurality of printed circuit boards are stackable into a multi-layer configuration;

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at least one coil (58) defined on each of the plurality of layers of the plurality of printed circuit boards;

at least a first printed circuit board of the plurality of printed circuit boards comprising a primary winding (N11, N12) of a transformer;

at least a second printed circuit board of the plurality of printed circuit boards comprising a secondary winding (N21, N22) of a transformer;

a connection member (51) configured to connect the windings on at least two of the plurality of printed circuit boards in either a parallel or a series electrical configuration (column 6, lines 63-67); and

a plurality of connector pins (41, 42) configured to electrically connect the plurality of printed circuit boards to the main circuit board, wherein each pin of the plurality of connector pins penetrates only the at least first printed circuit board of the plurality of printed circuit boards comprising the primary winding or the at least second printed circuit board of the plurality of printed circuit boards comprising the secondary winding.

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**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Williams, Umeno et al, Ohta et al., and Roessler et al. disclose related art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TD

April 7, 2002.

  
Please  
Primary Examiner